

**ABSTRACT OF THE DISCLOSURE**

A method of startup for an optical drive with an auto-balance system. When an optical disk is provided in the optical drive with the auto-balance system, a startup procedure, which includes a servo activating procedure and a system parameter adjustment procedure, is performed. Further, a rotation speed control procedure is performed cyclically according to a spindle motor RPM profile when the system parameter adjustment procedure is performed, so that data stored in the optical disk is correctly retrieved by the optical drive. Preferably, an interrupt subroutine is performed cyclically to perform the rotation speed control procedure.